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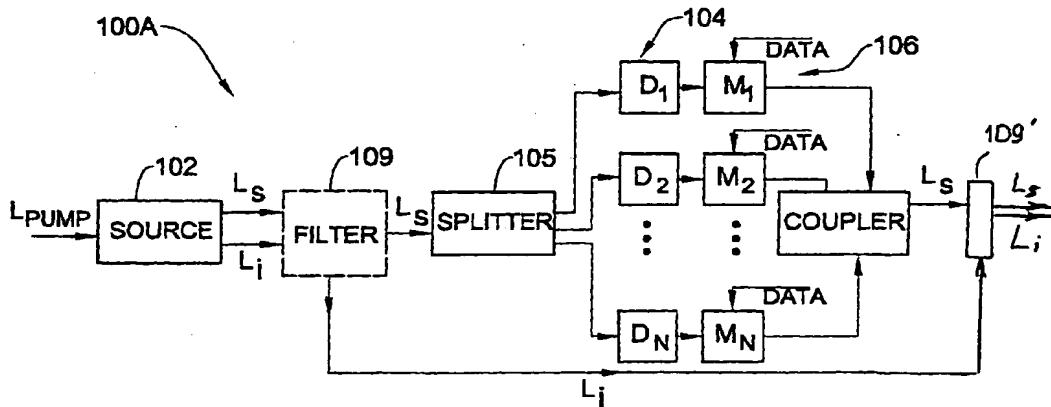
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND SYSTEM FOR USE IN OPTICAL CODE DIVISION MULTIPLE ACCESS



(57) Abstract: A method and device (100A) are provided for automatically generating a key and a conjugate key to be used in an optical code division multiple access system. The method comprises applying a down conversion process to pump input light to thereby produce down converted broadband signal and idler fields (L_s, L_i) that are complex conjugates of each other. The signal and idler fields thus serve as the key and its conjugate. Also provided according to the invention is a method for use in coding/decoding a signal in an optical code division multiple access system.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00328

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04J 14/00; G02F 1/35
US CL : 398/78; 359/326

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 398/77, 78; 359/326-332

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 2003/0147655 A1 (SHATTIL) 07 August 2003 (07.08.2003), see entire document.	1-60
A	NATARAJAN, B. et al, "High-Performance MC-CDMA via Carrier Interferometry Codes", IEEE TRANS. VEH. TECH., Nov. 2001, vol. 50, no. 6, pp. 1344-1353.	1-60

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

USPTO "WEST" Database

Search terms: conjugate, key, down adj conver\$, downconver\$, signal, idler, code adj division\$, cdma, complex adj conjugat\$